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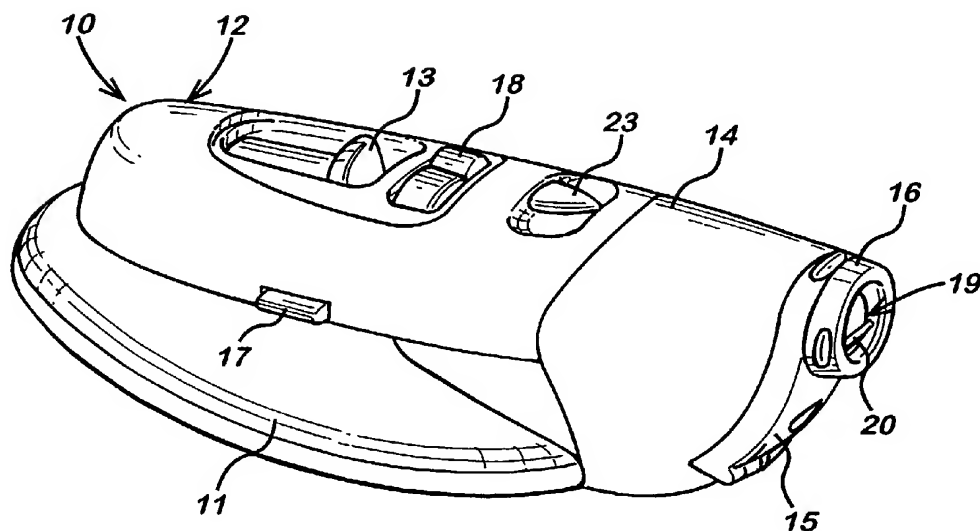
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[Continued on next page]

(54) Title: IN-SITU ADAPTER FOR AN ANALYTE TESTING DEVICE



(57) Abstract: An adapter for a standard glucose meter to convert the glucose meter into an integrated testing device is provided. The adapter comprises lancing device, a test strip port for holding a test strip in close proximity to a puncture site, a strip connector for providing an electrical connection between the test strip and the electronics in the glucose meter and a connector for connecting the adapter to the glucose meter. The adapter further includes an adapter cap, including a pressure ring for facilitating the expression of blood from a puncture site. The adapter includes a cocking mechanism for cocking the lancing device, a depth control mechanism for varying the penetration depth of the lancet and a trigger for actuating the lancet.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

PCT/GB 02/03772

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A61B5/15 A61B5/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 871 494 A (FREEMAN DOMINIQUE ET AL) 16 February 1999 (1999-02-16) column 11, line 16 -column 13, line 32; figures ---	1-3,5-7, 13,24,27
A	WO 97 42882 A (MERCURY DIAGNOSTICS INC) 20 November 1997 (1997-11-20)	1-6
X	page 10, line 4 -page 12, line 25 ---	24,27
A	WO 99 27854 A (SCHABBACH MICHAEL ;KINTZIG HANS (DE); MILTNER KARL (DE); MURAWSKI) 10 June 1999 (1999-06-10) the whole document ---	1,24,27
A	DE 42 34 553 A (FRESE VOLKER ;FRESE GOEDDEKE BEATE (DE)) 22 April 1993 (1993-04-22) the whole document ---	1,4-6, 24,27
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

*** Special categories of cited documents :**

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

11 February 2003

Date of mailing of the international search report

18/02/2003

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01 28423 A (FLYNN STEPHEN J ;KENNEDY GWENN E (US); GAINOR MEDICAL NORTH AMERIC) 26 April 2001 (2001-04-26) page 10, line 13 -page 15, line 13 ---	5-8,14, 17,20
A	US 4 895 147 A (BODICKY RAYMOND O ET AL) 23 January 1990 (1990-01-23) column 4, line 42 -column 5, line 24 -----	5-8,14

INTERNATIONAL SEARCH REPORT

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 28
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT – Diagnostic method practised on the human or animal body using a surgical step by puncturing the skin
2. ☒ Claims Nos.: 25, 26
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-13,24,27

An adapter for connecting a lancet device with a testing device

2. Claims: 14-23

A depth adjustment mechanism for a lancet device

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 25,26

Claims 25 and 26 relate and define their subject-matter in relation to a testing device, i.e. "a housing surface adapted to..." and "a projection configured for...". A testing device, however, is not a well defined and standardized object and, therefore, the features of a connector relating to such a device are not clearly defined, contrary to Article 6 PCT.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

PCT/GB 02/03772

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5871494	A	16-02-1999	DE 19855443 A1	17-06-1999
			GB 2374020 A	09-10-2002
			GB 2373731 A ,B	02-10-2002
			GB 2331934 A ,B	09-06-1999
<hr/>				
WO 9742882	A	20-11-1997	AU 3070397 A	05-12-1997
			AU 3131097 A	05-12-1997
			AU 3206797 A	09-12-1997
			AU 3207197 A	05-12-1997
			AU 3284797 A	05-12-1997
			AU 3368297 A	05-12-1997
			DE 19781044 T0	03-12-1998
			DE 19781046 T0	24-12-1998
			DE 19781097 T0	01-07-1999
			DE 19781098 T0	24-12-1998
			DE 29723357 U1	15-10-1998
			DE 29723371 U1	06-08-1998
			DK 64698 A	18-01-1999
			DK 64798 A	18-01-1999
			DK 67498 A	18-01-1999
			EP 0904022 A1	31-03-1999
			EP 0906062 A1	07-04-1999
			EP 0955914 A1	17-11-1999
			EP 0955909 A1	17-11-1999
			ES 2121564 A1	01-05-2000
			ES 2121565 A1	01-05-2000
			GB 2322561 A ,B	02-09-1998
			GB 2323792 A ,B	07-10-1998
			GB 2322562 A ,B	02-09-1998
			GB 2325167 A ,B	18-11-1998
			IL 124426 A	01-06-2000
			JP 3356782 B2	16-12-2002
			JP 2002503118 T	29-01-2002
			JP 2002502271 T	22-01-2002
			JP 2000511068 T	29-08-2000
			JP 2002503119 T	29-01-2002
			WO 9743962 A1	27-11-1997
			WO 9742882 A1	20-11-1997
			WO 9742883 A1	20-11-1997
			WO 9742885 A1	20-11-1997
			WO 9742886 A1	20-11-1997
			WO 9742888 A1	20-11-1997
			US 6015392 A	18-01-2000
			US 6332871 B1	25-12-2001
			US 6056701 A	02-05-2000
			US 6183489 B1	06-02-2001
			US 6099484 A	08-08-2000
			US 6352514 B1	05-03-2002
			US 6319210 B1	20-11-2001
			US 6048352 A	11-04-2000
			US 5879311 A	09-03-1999
			US 5951492 A	14-09-1999
			US 5857983 A	12-01-1999
			US 2002002344 A1	03-01-2002
<hr/>				
WO 9927854	A	10-06-1999	DE 19824036 A1	02-06-1999
			AU 736568 B2	02-08-2001
			AU 2155699 A	16-06-1999

INTERNATIONAL SEARCH REPORT

PCT/GB 02/03772

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9927854	A	CA 2310378 A1	10-06-1999
		CN 1283972 T	14-02-2001
		WO 9927854 A1	10-06-1999
		EP 1032307 A1	06-09-2000
		HU 0100071 A2	28-05-2001
		JP 2001524680 T	04-12-2001
		PL 340720 A1	26-02-2001
		US 6379317 B1	30-04-2002
DE 4234553	A	DE 9113046 U1	19-12-1991
	22-04-1993	DE 4234553 A1	22-04-1993
WO 0128423	A	US 6283982 B1	04-09-2001
	26-04-2001	AU 1335501 A	30-04-2001
		EP 1221893 A2	17-07-2002
		WO 0128423 A2	26-04-2001
		US 2002029058 A1	07-03-2002
US 4895147	A	NONE	